

## CLAIMS

What I claim is:

1. A relief valve for use in a diaphragm flush valve, the relief valve having a seating member, a shank extending downward from the seating member, a stem affixed to the shank and extendable down through a guide member of the diaphragm flush valve, and a sleeve member structured to slide on the stem, the improvement to which comprises:

- (a) the shank having a threaded exterior surface and a lower end, and
- (b) a tubular member having an upper body section and a lower body section, the upper body section being provided with an interior threaded surface sized to screw onto the shank threaded exterior surface, the tubular member having an interior passageway extending vertically through the upper body section and the lower body section and of sufficient breadth to extend about the stem and the sleeve, the lower body section having a stop extending into the passageway to retain the sleeve member in the passageway, the passageway having sufficient length to permit the sleeve to slide along the stem a predetermined minimum distance.

2. A relief valve according to claim 1 wherein the threads of the exterior surface of the shank have a pitch to effect a known change in the quantity of water flow through the diaphragm flush valve during a flush operation with every 360° turn of the tube member.

3. A relief valve according to claim 2 wherein the quantity is one gallon.

4. A relief valve according to claim 1 wherein the lower body section having a cutout section positioned to permit visual observation of the sleeve member.

5. A relief valve according to claim 4 wherein:

(a) the upper body section is provided with a gap extending the length of the upper body section and into the cutout section, and

(b) the tube member is constructed of material having sufficient flexibility and resiliency to permit the expansion of the gap to permit the stem to pass through the gap and to permit the retraction of the gap to its original width.

6. A relief valve according to claim 5 wherein the upper body section has a vertical length no greater than about the distance between the lower end of the shank and the top surface of the sleeve member.

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